Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim1 (Original)
Claim 2 (Currently Amended)
Claims 3-5 (Original)
Claim 6 (Currently Amended)
Claims 7-10 (Original)
Claim 11 (Currently Amended)
Claims 12-16 (Original)
Claim 17 (Currently Amended)
Claims 18-25 (Original)

Please amend the claims as follows:

1. (Original) An apparatus for creating a temporary transit path for data packet transmission in a subnetwork, the subnetwork having a source station, a next hop router, and an intermediate router that is interconnected by a plurality of permanent transit paths to the source station and the next hop router, the apparatus comprising:

(a) means for initiating transmission of the data packets over the permanent transit paths that are coupled between the source station and the next hop router;

(b) means for measuring a bit rate of the data packets that are transmitted from the source station to the next hop router;

(c) means for continuing to transmit data packets over the selected permanent transit paths when the measured bit rate is below a first predetermined value;

(d) means for creating a temporary transit path between the source station and the next hop router when the measured bit rate is above the first predetermined value; and

(e) means for transmitting the data packets over the created temporary transit path when the measured bit rate is above the first predetermined value.

2. (Currently Amended) An apparatus as recited in claim 1, further comprising means for stopping transmission of the data packets over the permanent transit paths when the measured bit rate is above the first predetermined value~~; and~~.

3. (Original) An apparatus as recited in claim 1, further comprising:

means for repeating act performed by means (b) after creating the temporary transit path and continuing transmission of the data packets over the created temporary transit path;

means for tearing down the created temporary transit path when the bit rate is below the second predetermined value; and

means for continuing transmission of the data packets over the permanent transit paths from the source station to the next hop routers when the bit rate is below the second predetermined value.

4. (Original) An apparatus as recited in claim 3, further comprising means for stopping transmission of the data packets over the temporary transit path when the bit rate is below a second predetermined value and before tearing down the created temporary transit path;

5. (Original) An apparatus as recited in claim 3, wherein the second predetermined value is significantly lower than the first predetermined value such that

the created temporary transit path is not dismantled due to minor fluctuations in the bit rate.

6. (Currently Amended) An apparatus as recited in claim 1, wherein means creating a temporary transit path is accomplished by ~~the acts of:~~

sending a next hop request from the source station through the permanent transit paths to the next hop router such that the next hop router replies and identifies itself as the next hop; and

creating the temporary transit path in response to the next hop router reply and identification.

7. (Original) An apparatus as recited in claim 6, wherein the next hop request is in the form of next hop resolution protocol.

8. (Original) An apparatus as recited in claim 1, wherein the temporary transit path is in the form of a switched virtual circuit and the permanent transit paths are in the form of permanent virtual circuits.

9. (Original) An apparatus as recited in claim 8, wherein the subnetwork is a connection-oriented type that supports asynchronous transfer mode (ATM) service.

10. (Original) An apparatus as recited in claim 1, wherein the next hop router is an egress router coupled to a second subnetwork that includes a destination station to which the data packets are also being sent by the egress router.

11. (Currently Amended) An apparatus as recited in claim 10, further comprising:

means for creating a second temporary transit path for data packet transmission in the second subnetwork, the subnetwork having the egress router, a second next hop router, and a second intermediate router that is interconnected by a

plurality of second permanent transit paths to the egress router and the second next hop router;

means for initiating transmission of the data packets over the second permanent transit paths that are coupled between the egress router and the second next hop router;

means for measuring a bit rate of the data packets from the egress router to the second next hop router after initiating the transmission;

means for continuing to transmit data packets over the second permanent transit paths when the measured bit rate is below the first predetermined value;

means for creating a second temporary transit path between the egress router and the second next hop router when the measured bit rate is above the first predetermined value; and

means for transmitting the data packets over the second created temporary transit path when the measured bit rate is above the first predetermined value.

12. (Original) An apparatus as recited in claim 11 further comprising means for stopping transmission of the data packets over the second permanent transit paths when the measured bit rate is above the first predetermined value.

13. (Original) A source station router for creating a temporary transit path in a subnetwork, the subnetwork including a source station, the source station router, a next hop router, and an intermediate router that is interconnected by a plurality of permanent transit paths to the source station and the next hop router, the source station router comprising:

a bit rate detector that is configured to measure a bit rate of the data packets from the source station to the next hop router and to output a transmission

control signal that indicates whether the measured bit rate is above the first predetermined value;

a temporary transit path builder configured to receive the transmission control signal and to create a temporary transit path between the source station and the next hop router when the transmission control signal indicates that the measured bit rate is above a first predetermined value; and

a data packet transmitter configured to receive the transmission control signal, the data packet transmitter being configured to transmit data packets over the at least one permanent transit path such that the data packet may be sent from the source station to the next hop router when the transmission control signal indicates that the measured bit rate is below the first predetermined value, and the data packet transmitter being configured to transmit data packets over the created temporary transit path such that the data packet may be sent from the source station to the next hop router when the transmission control signal indicates that the measured bit rate is above the first predetermined value.

14. (Original) A source station router as recited in claim 13, wherein the transmission control signal further indicates whether the measured bit rate is below a second predetermined value, and the temporary transit path builder is further configured to tear down the created temporary transit path between the source station and the next hop router when the transmission control signal indicates that the measured bit rate is below the second predetermined value.

15. (Original) A source station router as recited in claim 13, wherein the data packet transmitter is further configured to stop transmission of the data packets over the permanent transit paths when the measured bit rate is above the first predetermined value.

16. (Original) A source station router as recited in claim 13, wherein the bit rate detector is further configured to repeat measuring a bit rate of the data packets from the source station to the next hop router and to output a transmission control signal that indicates whether the measured bit rate is above the first predetermined

value after creating the temporary transit path and continuing transmission of the data packets over the created temporary transit path, wherein the temporary transit path builder is further configured to tear down the created temporary transit path when the bit rate is below the second predetermined value, and wherein the data packet transmitter is further configured to continue transmission of the data packets over the permanent transit paths from the source station to the next hop routers when the bit rate is below the second predetermined value.

17. (Currently Amended) A source station router as recited in claim 16, wherein the data packet transmitter is further configured to stop transmission of the data packets over the temporary transit path when the bit rate is below a second predetermined value and before tearing down the created temporary transit path; .

18. (Original) A source station router as recited in claim 16, wherein the second predetermined value is significantly lower than the first predetermined value such that the created temporary transit path is not dismantled due to minor fluctuations in the bit rate.

19. (Original) A source station router as recited in claim 13, wherein creating a temporary transit path is accomplished by the acts of:

sending a next hop request from the source station through the permanent transit paths to the next hop router such that the next hop router replies and identifies itself as the next hop; and

creating the temporary transit path in response to the next hop router reply and identification.

20. (Original) A source station router as recited in claim 19, wherein the next hop request is in the form of next hop resolution protocol.

21. (Original) A source station router as recited in claim 13, wherein the temporary transit path is in the form of a switched virtual circuit and the permanent

transit paths are in the form of permanent virtual circuits.

22. (Original) A source station router as recited in claim 21, wherein the subnetwork is a connection-oriented type that supports asynchronous transfer mode (ATM) service.

23. (Original) A source station router as recited in claim 13, wherein the next hop router is an egress router coupled to a second subnetwork that includes a destination station to which the data packets are also being sent by the egress router.

24. (Original) A source station router as recited in claim 23,

wherein the temporary transit path builder is further configured to create a second temporary transit path for data packet transmission in the second subnetwork, the subnetwork having the egress router, a second next hop router, and a second intermediate router that is interconnected by a plurality of second permanent transit paths to the egress router and the second next hop router,

wherein the data packet transmitter is further configured to initiate transmission of the data packets over the second permanent transit paths that are coupled between the egress router and the second next hop router,

wherein the bit rate detector is further configured to measure a bit rate of the data packets from the egress router to the second next hop router after initiating the transmission,

wherein the data packet transmitter is further configured to continue transmitting data packets over the second permanent transit paths when the measured bit rate is below the first predetermined value,

wherein temporary transit path builder is further configured to create a second temporary transit path between the egress router and the second next hop router when the measured bit rate is above the first predetermined value, and

wherein the data packet transmitter is further configured to transmit the data packets over the second created temporary transit path when the measured bit rate is above the first predetermined value.

25. (Original) A source station router as recited in claim 24, wherein the data packet transmitter is further configured to stop transmission of the data packets over the second permanent transit paths when the measured bit rate is above the first predetermined value.